Rip Current Safety

Information Brief

Introduction

Information Brief

- **Recognizing that many Marines will head to the beach this Labor Day weekend, and in light of a recent drowning due to rip currents, we must educate our Marines on the dangers associated with going to the beach.**

- **In this brief you will learn about rip currents: what causes them, how to recognize them and what to do if you are caught in one.**

Background

Information Brief

- **Rip currents are the biggest hazard to all beachgoers, particularly for weak/non-swimmers, but they can sweep even the strongest swimmer out to sea.**
- **Rip currents are the Number One concern for beach lifeguards.**
- **Rip currents are responsible for about 150 deaths every year in the United States.**
- **Rip currents are terrifying because they catch you off guard: One minute you're bobbing along peacefully in the surf, the next you're being dragged out to sea.**
- **Rip currents occur in all sorts of weather and on a wide range of beaches. Unlike violent, crashing waves, you probably won't notice a rip current until you're caught in one.**
- **Each year America's lifeguards rescue nearly 50,000 people caught in rip currents.**

What is a rip current?

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- A rip current is a narrow, powerful current of water running perpendicular to the beach. It is caused by water accumulated on shore from waves that create a “seaward pressure”. This pressure is released in an area with the least amount of resistance and runs out into the ocean.

- Rip currents typically extend from near the shoreline, through the surf zone and past the line of breaking waves. (The surf zone is the area between the high tide level on the beach to the seaward side of breaking waves.)

- Rip currents may be 200 to 2,500 feet in length but are typically less than 30 feet wide.

- The length of the rip current also varies. Rip currents begin to slow down as they move offshore beyond the breaking waves, but sometimes extend for hundreds of feet beyond the surf zone.

- Rip currents can move quickly, often 5 miles per hour or faster.

- Rip currents also exist in areas where the strength of the waves are weakened by objects such as rock jetties, piers, natural reefs, and even large groups of bathers.

What's not a rip current?

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- **It is NOT a “RIPTIDE” - This is a misnomer. Tides are the rising and falling of water levels in the ocean. They are primarily caused by the moon’s gravitational pull and they change gradually and predictably every day. Rip currents are caused by the shape of the shoreline and may be sudden and unexpected.**

- **It is NOT an “UNDERTOW” - Rip currents are sometimes referred to as "undertow" but this is inaccurate. Undertow describes a current of water that pulls down to the ocean floor. Rip currents move along the surface of the water pulling you out to sea, not underneath the water's surface. If a rip current knocks you off your feet in shallow water you may end up being pulled along the ocean bottom, if this happens relax your body and the current should keep you near the surface.**

The basics

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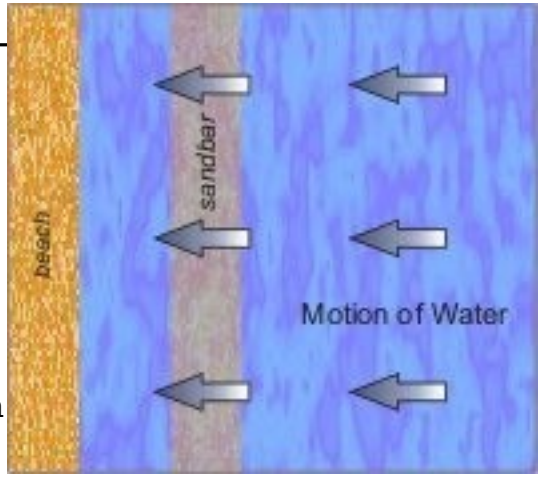
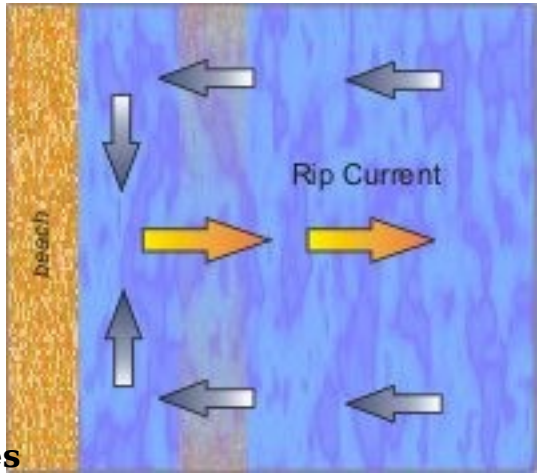
When do Rip Currents usually form?

- Rip currents can be found everyday.
- Under most tide and sea conditions the speeds are relatively slow.
- Under certain wave, tide, and beach profile conditions the speeds can quickly increase to become dangerous to anyone entering the surf.
- The strength and speed of a rip current will likely increase as wave height and wave period increase and are most dangerous during high surf conditions.



Where do Rip Currents usually form?

- Rip currents most typically form at low spots or breaks in sandbars and also near structures such as groins, jetties and piers.
- Rip currents can be very narrow or extend hundreds of yards wide.
- The seaward pull of rip currents varies:
  - Sometimes rip currents end just beyond the line of breaking waves
  - Sometimes rip currents continue to push hundreds of yards offshore



How to spot a rip current

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From Above

From the Beach

Avoiding a rip current

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- Whenever possible, swim at a lifeguard-protected beach.
- Never swim alone.
- Learn how to swim in the surf, it's not the same as swimming in a pool or lake.
- Be cautious at all times, especially when swimming at unguarded beaches.
- If in doubt, don’t go out.
- Obey all instructions and orders from lifeguards.
- Ask a lifeguard about the conditions before entering the water.
- Stay at least 100 feet away from piers and jetties, permanent rip currents often exist near these structures.
- Consider using polarized sunglasses when at the beach, they will help to identify signatures of rip currents by cutting down glare and reflected sunlight off the ocean’s surface.
- Pay especially close attention to children and the elderly when at the beach - even in shallow water the wave action can cause loss of footing.

I'm in a Rip Current!

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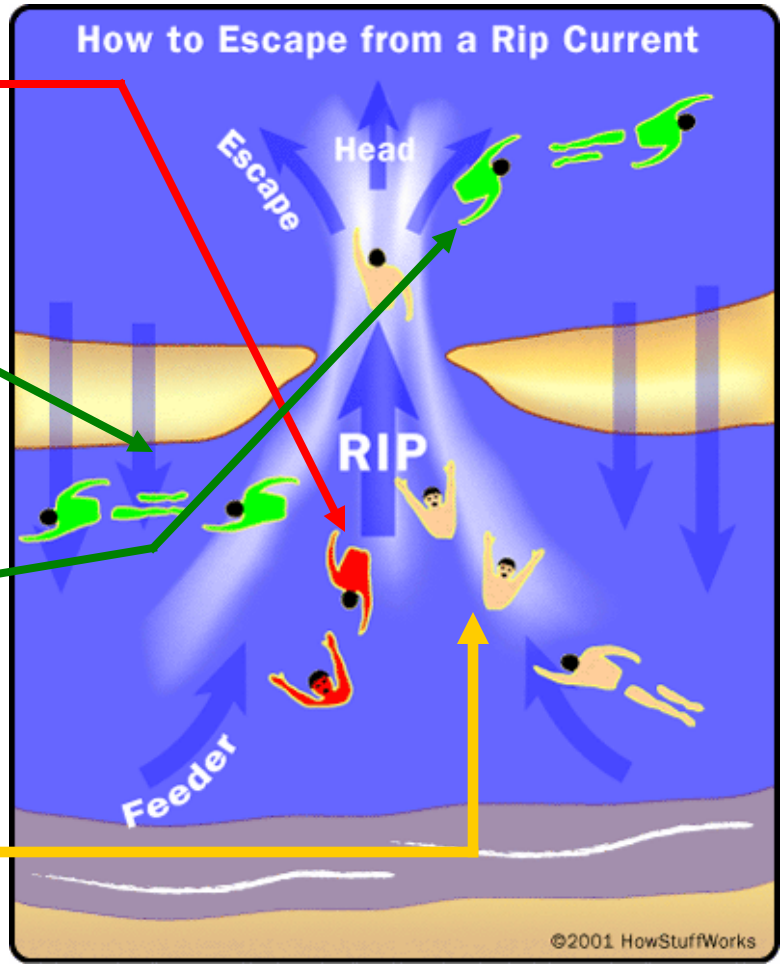
- Try to remain calm to conserve energy.
- Don't fight the current.
- Swim across the current in a direction following the shoreline.
- When out of the current, swim and angle away from the current and towards shore.
- If you can't escape this way
  - Try to float or calmly tread water.
- Rip current strength eventually subsides offshore.
  - When it does, swim towards shore.
- If at any time you feel you will be unable to reach shore
  - Draw attention to yourself:
  - Face the shore
  - Wave your arms
  - Yell for help.



What can I do to help?

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- If you see someone in trouble, get help from a lifeguard.
- If no lifeguard is available, have someone call 9-1-1.

- Throw the rip current victim something that floats
  - A lifejacket

  - A boogie board

  - A cooler

  - A ball.

- Yell instructions on how to escape.

!!!!! Many have drowned trying to help others. Don't become a victim while trying to help someone else!!!!

Rescue Attempt

Information Brief

Remember this warning from the last slide:

!!!!! Many have drowned trying to help others. Don't become a victim while trying to help someone else!!!!

- **But we are Marines and as Marines we most likely will not sit there and watch someone in trouble without rendering assistance.**
- **Therefore think smart before you**  **pt to enter the rip current to save someone,**
- **Tell someone to get a lifeguard**
- **Tell someone to call 911**
- **Then, if you must enter the water, DO NOT enter without something that floats!!!!!**
- **A Life Jacket**
- **A Boogie Board**
- **A Raft**
- **A Surf Board**

- **Do not abandon the above to effect the rescue. Stay on your Flotation gear!!!!!!!!!!!!**
- **Once you have the victim either on board with you or holding on to the flotation device, exit the rip current by swimming parallel to the shore.**

Summary

Information Brief

Once again lets look at the Rip Current safety tips

- **Whenever possible, swim at a lifeguard-protected beach.**
- **Never swim alone.**
- **Learn how to swim in the surf, it's not the same as swimming in a pool or lake.**
- **Be cautious at all times, especially when swimming at unguarded beaches.**
- **If in doubt, don’t go out.**
- **Obey all instructions and orders from lifeguards.**
- **Ask a lifeguard about the conditions before entering the water.**
- **Stay at least 100 feet away from piers and jetties, permanent rip currents often exist near these structures.**
- **Consider using polarized sunglasses when at the beach, they will help to identify signatures of rip currents by cutting down glare and reflected sunlight off the**

Conclusion

Information Brief

Each year numerous Marines die in swimming related mishaps. The 2012 summer beach season has not yet ended and we want to help ensure that we do not lose another warrior to Rip Currents. Everyone going to the beach needs to be educated about the dangers of rip currents -- we cannot afford to lose another Marine, Sailor or family member to this type of tragedy.